



**Weekly Wire**  
**News from East Asia and Pacific**  
**May 9, 2013**

**AUSTRALIA: US National Academy Members**

Three members of the Australia Academy of Science, Chris Goodnow (immunology), Graham Farquhar (environmental biology), and Peter Hall (statistics), were among the 84 new members and 21 foreign associates elected to the National Academy of Science.

<http://science.org.au/news/media/1may13.html>

**AUSTRALIA: Too Many PhDs?**

Only 1 in 8 graduates actually get the research job they want post PhD. So there are currently too many PhD graduates produced for the number of jobs available in the research world. It is definitely not an easily solved problem and views are mixed as to how to fix it. Obviously more government funding will be required if the number of PhD graduates continue to increase or the PhD program will need significant changes in order to better prepare PhDs for jobs in industry and the government rather than academia or research.

<http://www.asc.asn.au/blog/2013/05/01/too-many-phds/>

**AUSTRALIA: New Silicon to Boost Solar Panels**

A research team from University of New South Wales (UNSW) discovered a mechanism to control hydrogen atoms by which they can correct deficiencies in silicon. Standard commercial silicon cells currently have a maximum efficiency of around 19%, while the new technique, patented by UNSW researchers, is expected to produce efficiencies between 21% and 23%. The project, supported by the Australian Renewable Energy Agency, is expected to be completed in 2016.

<http://www.sciencealert.com.au/news/20130705-24341.html>

**JAPAN: Legendary Atlantis**

The *Shinkai 6500* manned submersible of the Japan Agency for Marine-Earth Science and Technology found a large mass of granite on the seabed off the coast of Rio de Janeiro, suggesting a continent may have existed in the Atlantic Ocean. Although a Brazilian official mentioned the legendary island of Atlantis, a professor from Gifu University said researchers must look further into the composition of the granite and see if it matches the granite now found in Africa or South America.

<http://www.japantimes.co.jp/news/2013/05/07/national/japanese-submersible-finds-possible-signs-of-legendary-atlantis-off-brazil/>

**JAPAN: Chen Award**

Dr. Yoshihide Hayashizaki, director of the RIKEN Preventive Medicine and Diagnosis Innovation program, has been awarded the Chen Award for Distinguished Academic Achievement in Human Genetic and Genomic Research 2013 by the Human Genome Organization for his longstanding contribution to transcriptomics research. He was, in particular, commended for his achievements in the development of full-length cDNA technology and human genomics and human genetics in the Asia-Pacific region through FANTOM, a large-scale international project.

[http://www.riken.go.jp/en/pr/topics/2013/20130426\\_2/](http://www.riken.go.jp/en/pr/topics/2013/20130426_2/)

#### **JAPAN: Sensors for Research on Tohoku Earthquake**

The Japan Agency for Marine-Earth Science and Technology research vessel *Kairei* has successfully retrieved the sensors from the deepest borehole observatory ever installed at a depth of nearly 7000 meters. The R/V *Kairei* carried out the complex sequence of operations in the Japan Trench using the remotely operated vehicle *KAIKO 7000-II* to locate, detach and reel-in the array of 55 temperature sensing loggers from a borehole that straddles the plate boundary where the fault slipped ~50m during the magnitude-9 2011 Tohoku-oki earthquake.

[http://www.jamstec.go.jp/e/about/press\\_release/20130430/](http://www.jamstec.go.jp/e/about/press_release/20130430/)

#### **JAPAN: US-Japan Joint High Level Committee (JHLC) Meeting**

The 12<sup>th</sup> US-Japan JHLC meeting was held in Washington, DC on April 30, co-chaired by Dr. John Holdren and two Japanese ministers, Mr. Hakubun Shimomura and Mr. Ichita Yamamoto. Speakers from NSF were Dr. Cora Marrett, Dr. Keith Marzullo, Dr. Alan Blatecky, and Dr. Rathindra DasGupta. Both countries agreed to continue to advance robust collaboration in S&T fields. JHLC meetings have been held approximately every other year since the U.S.-Japan S&T Agreement was signed in 1988.

<http://www.state.gov/r/pa/prs/ps/2013/04/208651.htm>

#### **KOREA: English-language Journal on Information Science**

The Korea Institute of Science and Technology Information (KISTI) launched the first English-language journal of information science in Korea. Whereas it has started as a quarterly publication, KISTI plans to increase its publication frequency in the years to come.

[http://khnews.kheraldm.com/view.php?ud=20130425000705&md=20130426003251\\_AP](http://khnews.kheraldm.com/view.php?ud=20130425000705&md=20130426003251_AP)

#### **KOREA: Superlens**

A research team led by a KAIST professor developed a superlens that has a resolution three times higher than conventional optical lenses. It enables viewers to see particles that are 100 nanometers small and observe structures within cells and viruses.

[http://world.kbs.co.kr/english/news/news\\_Sc\\_detail.htm?No=95561&id=Sc](http://world.kbs.co.kr/english/news/news_Sc_detail.htm?No=95561&id=Sc)

#### **SINGAPORE: Gyro-sensor**

Shikino High Tech, a Japanese company that leads the market of camera systems and image processing modules, and A\*STAR Institute of Microelectronics have signed a research agreement to develop a low power and high performance Gyro-sensor for commercial applications. Gyro-sensor is incorporated in consumer electronics, which make use of motion-sensing capability to perform certain functions such as motion control in gaming devices, picture stabilization in camcorders, and various navigation-related applications including GPS for smartphones and tablets.

<http://www.a-star.edu.sg/Media/News/PressReleases/tabid/828/articleType/ArticleView/articleId/1808/Default.aspx>